

Work Order ID 87632

\*87632\*

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July-23-12 2:48:30 PM

Item ID: D119-646-311 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Ground Handling  
 Start Date: 7/03/12 Start Qty: 3.00 \*3\* Cust Item ID:  
 Required Date: 8/03/12 Req'd Qty: 3.00 \*3\* Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/07/24 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start \*NR1\*  
 Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
IIN-D119-646	B								
100		0.00							
*100*									
DC		0.00							
Document Control	Memo Photocopy bluefile & type labels per PPP D119-646-311 CHG001								
110	Pick Kit	0.00							
*110*									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
*120*									
QC	Memo	0.00							
Quality Control									

DAS  
15  
12/11/05

Handwritten: MLJ 12-10-25

Handwritten: 3

Handwritten: 3 12/11/05

DAS  
15  
12/11/05

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other _____ _____ _____ _____
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# Picklist Print

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Page 1

Work Order ID: 87632

Parent Item: D119-646-311

Parent Item Name: Ground Handling

Start Date: 7/03/12

Required Date: 8/03/12

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<b>D3886-041</b> Lug Assembly		Manufactured	No			110	Each	6.0000	2	88235 <sup>6</sup>	JB		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST467		6							
				75082		4							
				78961		2							
<b>D2652</b> Bushing		Manufactured	No			110	Each	150.0000	8	91227 <sup>24</sup>	JB		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		44							
				31985		44							
				ST013		97							
				73836		36							
				81951		61							
				ST016		9							
				83252		9							
<b>AN3046A</b> BOLT		Purchased	No			110	Each	41.0000	4	123116 <sup>12</sup>	JB		
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST355		41							
				120447		3							
				122204		38							
<b>AN960G10L</b> washer	NAS1149C0332R	Purchased	No			110	Each	21.0000	4	123355 <sup>12</sup>	JB	12/11/02	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST		21							
				107534		21							

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
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Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other

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Page 2

Work Order ID: 87632

Parent Item: D119-646-311

Parent Item Name: Ground Handling

Start Date: 7/03/12

Required Date: 8/03/12

Start Qty: 3.00

Required Qty: 3.00

~~MS21043-4~~ ~~MS21043-3~~ Purchased No

110 Each 2,069.0000 ~~4~~ (- 12) - 20 12/11/02

Nut  
DFE  
12/11/05

Location	Loc Qty	Loc Code
315	600	
122452	600	
FG	40	
104603	40	
ST301	429	
119546	4	
121162	46	
121652	379	
ST318	1000	
122141	1000	122141

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Shop Packet Print

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NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
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Equip/Tooling <input type="checkbox"/>											
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Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
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Training <input type="checkbox"/>											
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FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

REFERENCE ONLY

SMB

DART AEROSPACE USA, INC.

IIN-D119-646

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Item	Qty -011	Qty -012	Qty -111	Qty -112	Qty -211	Qty -212	Qty -041	Qty -141	Qty -151	Qty -241	Qty -251	Qty -311	Part Number	Description
69	24	24	24	24	24	24							AN960C416L	WASHER (OR NAS1149C0432R)
70	8	8	8	8	8	8							AN960C516L	WASHER (OR NAS1149C0532R)
71	8	8	8	8	8	8							MS21043-3	NUT
72	12	12	12	12	12	12							MS21043-4	NUT
73	12	12	12	12	12	12							D2712	SET SCREW
74	16	16	16	16	16	16							D3672-7	WASHER
75	24	24	24	24	24	24							D3672-3	WASHER
76	8	8	8	8	8	8							D3672-7	WASHER
80	1	1	1	1	1	1							D3407-041	TOW RING
81	1	1	1	1	1	1							D3417-5	WASHER
82	1	1	1	1	1	1							D3456-1	WASHER
83	1	1	1	1	1	1							MS21043-4	NUT
84	1	1	1	1	1	1							D3417-7	WASHER
90													D3886-041	LUG ASSEMBLY
91													B2652	BUSHING
92													AN3C46A	BOLT
93													AN960C10L	WASHER (OR NAS1149C0332R)
94													MS21043-3	NUT

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Revision: B  
Date: 09.06.29

DART AEROSPACE USA, INC.

IIN-D119-646

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## 4.0 PARTS LIST

## 4.1 Standard Skidtubes

Item	Qty -011	Qty -012	Qty -111	Qty -112	Qty -211	Qty -212	Qty -041	Qty -141	Qty -151	Qty -241	Qty -251	Qty -311	Part Number	Description
	X												D119-646-011	STANDARD SKIDTUBE INSTALLATION WITH WEARPADS, LH
		X											D119-646-012	STANDARD SKIDTUBE INSTALLATION WITH WEARPADS, RH
			X										D119-646-111	STANDARD SKIDTUBE INSTALLATION WITH FULL LENGTH WEARPLATES & WEARPADS, LH
				X									D119-646-112	STANDARD SKIDTUBE INSTALLATION WITH FULL LENGTH WEARPLATES & WEARPADS, RH
					X								D119-646-211	STANDARD SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, LH
						X							D119-646-212	STANDARD SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, RH
	1	1					X						D119-646-041	REPLACEMENT STANDARD SKIDTUBE WITH WEARPADS
			1	1				X					D119-646-141	REPLACEMENT STANDARD SKIDTUBE WITH FULL LENGTH WEARPLATES & WEARPADS
									X				D119-646-151	WEARPLATE KIT STANDARD SKIDTUBE
					1	1				X			D119-646-241	REPLACEMENT STANDARD SKIDTUBE WITH TRAINING WEARPLATES
											X		D119-646-251	TRAINING WEARPLATES STANDARD SKIDTUBE
	1	1	1	1	1	1						X	D119-646-311	GROUND HANDLING KIT
1							1						D3887-041	STANDARD SKIDTUBE ASSY. WITH WEARPAD
20								1					D3887-043	STANDARD SKIDTUBE ASSY. WITH WEARPLATE & WEARPAD
26									1				D3847-043	FWD WEARPLATE ASSY
27									1				D3847-045	CENTER WEARPLATE ASSY
28									1				D3847-047	AFT WEARPLATE ASSY
29									5				D3847-1	WEARPAD
30									1				D3847-11	WEARPAD
31									30				AN3C5A	BOLT
32									30				AN960C10L	WASHER (OR NAS1149C0332R)
40										1			D3887-045	STANDARD SKIDTUBE ASSY. TRAINING WEARPLATE
44											1		D3849-041	FWD TRAINING WEARPLATE ASSY
45											1		D3849-043	AFT TRAINING WEARPLATE ASSY
51											16		D3904-1	WASHER
52											8		AN3C46A	BOLT
53											8		MS21043-3	NUT
60	2		2		2								D3883-1	SADDLE, OUTSIDE, LH
61		2		2		2							D3883-2	SADDLE, OUTSIDE, RH
62	2		2		2								D3884-1	SADDLE, INSIDE, LH
63		2		2		2							D3884-2	SADDLE, INSIDE, RH
64	16	16	16	16	16	16							D2652	BUSHING
65	8	8	8	8	8	8							AN3C50A	BOLT
66	12	12	12	12	12	12							AN4C6A	BOLT
67	8	8	8	8	8	8							MS21250-05006	BOLT
68	8	8	8	8	8	8							AN960C10L	WASHER (OR NAS1149C0332R)

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